

taxiways including floodlights attract birds directly and indirectly (Ali and Grubb 1981, 1984). It is most likely that predominantly ground birds like stone curlew, redwattled lapwing, painted snipe, rain quail, black partridge and night heron frequent the runway for insects or insectivorous vertebrates that are attracted towards lights in the aerodrome area. Owls, nightjars and bats are nocturnal in their habits and are known to hunt for prey during night time in aerodrome areas and hence are hazardous to aircraft mainly at night.

Out of the 22 nocturnal bird and bat strikes to aircraft where altitude of incident is known, 50% oc-

curred at ground level and the rest at different altitudes, the highest recorded being 2424 m. Nocturnal bird and bat strikes have caused significant damage to aircraft engines (ten times), windshield (twice) and even to nose cone, landing gear and landing lights (once each).

This data was collected as a part of the work of the BNHS bird hazard research programme being funded since 1980 by Aeronautics R & D Board, Defence Ministry, Government of India under its Operational Problems Panel.

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April 3, 1991

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28. RECORDS OF THE GHARIAL *GAVIALIS GANGETICUS* (GMELIN) FROM THE DHAKUAKHANA AREA OF ASSAM

(With a text-figure)

Dhakuakhana is a sub-division of Lakhimpur district in the far eastern part of Assam. The sub-division is entirely on the flood-plain zone of the Brahmaputra and the major tributary, the Subansiri. A large number of smaller rivers and channels criss-cross the sub-division, making it a rich area for riverine fauna (Fig. 1). During a stay of about one and a half years (November 1989 to April 1991) I collected data on the occurrence of the gharial *Gavialis gangeticus*, some of which are very recent. These are presented chronologically.

1950: A major earthquake shook the whole of north-east India. The Subansiri river was blocked for four days by a heavy landslide upstream, resulting in drying up of many channels downstream. The villagers of Oyengia killed one gharial and also two mugger *Crocodylus palustris* on the river bed.

1953-54: One seen in the Rotua river. It was feeding on a large borali fish (*Wallago attu*). The local villagers saw the gharial tossing up the fish while eating.

1960: Gharials not uncommon in the Korha

river near Samporamukh.

1974: A boy was attacked and injured by a gharial on the Chela river near Baghchuk. Up to 1973, sighting of 3-4 of these reptiles basking on the banks of the Chela river was not uncommon.

1975 (mid 1970s): One large gharial suddenly appeared in the Charikaria river near Dhakuakhana proper, creating panic among the bathers and fishermen. It was shot by a local hunter. Its length was about 6 m

1982-83: A gharial reportedly seen by the Mishing tribal people near Matmora on the Brahmaputra river.

1986: (a) One seen near Tekeliphuta in the Kherkotia suti (channel) just near its junction with the Brahmaputra. (b) One villager was injured when a gharial attacked him in the Chela river near Chelajan Kachari village.

1986-87: One seen in the Korha river near its confluence with the Charikaria river. The locals who saw it chased it downstream through the Chela river to the Kherkotia suti. Ultimately the Mishing tribals

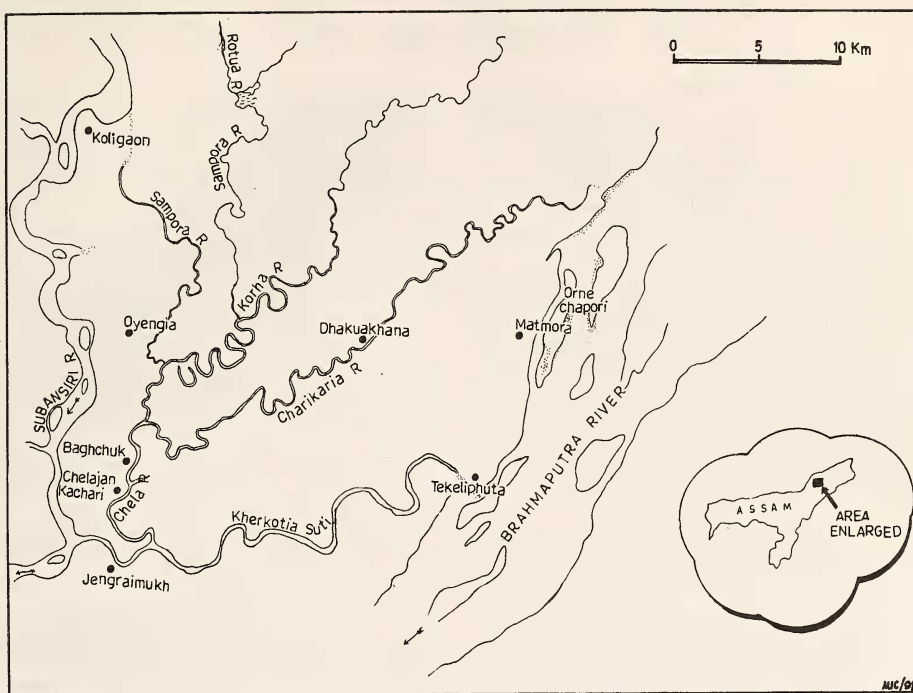


Fig. 1. Records of gharial from Dhakuakhana area.

killed it near Jengraimukh. It was about 4 m long.

1987: One seen in the Rotua river by the local villagers. It was about 3-4 m long.

1988: One near Tekeliphuta in the Brahmaputra; it was about 2.5 m long.

1989: One seen by the villagers of Koligaon on the Subansiri river during the floods.

The main reasons for decline of the gharial in the area are, (1) Use of *bheta* across the smaller rivers like the Korha, Charikoria and Chela (average width 80-90 m). *Bheta* is a type of temporary bund made of bamboo and is put across the rivers to stop movement of fish. This ultimately prevents the gharial and even the Gangetic dolphin (*Platanista gangetica*) coming upstream; (2) Heavy year-round use of the rivers for fishing, bathing and washing (all the known

and potential basking sites have been occupied by humans for various activities including setting up of fishing camps; and (3) Chasing and killing of any gharial sighted. While there are possibilities of gharial still living in the larger Brahmaputra and Subansiri rivers they are unlikely to be seen in the other rivers.

During my stay I prepared and submitted to the Government a proposal for a sanctuary, namely the Orne Chapori Wildlife Sanctuary (15 sq. km), which could provide a much needed refuge for the gharial in this stretch of the Brahmaputra river. The proposed area covers some islets with wide sand banks and water area of the Brahmaputra near Matmora.

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A. CHOUDHURY